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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/751,529

01/06/2004

Kenichiro Ishikawa

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3287

23353

7590

10/03/2006

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EXAMINER

PATEL, NITIN

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/751,529	<b>Applicant(s)</b> ISHIKAWA ET AL.	
	<b>Examiner</b> Nitin Patel	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>- Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                         |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/3/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-12 is rejected under 35 U.S.C. 102(e) as being anticipated by Ham (U.S. Patent No. 7,034,786)

As per claims 1,6 Ham shows a liquid crystal display device having a plurality of data signal lines (in fig.5 element 97), a plurality of gate signal lines (in fig.5 element 98) disposed intersection to the data signal lines, pixel transistors (element TFT in fig.5) disposed at intersections of the data signal lines and the gate signal lines (in fig.5 at the intersection of element 97 and element 98), and capacitors (element Clc in fig.5 at the pixel) disposed at the intersections, the pixel transistors each having a control electrode, an input electrode, and an output electrode, at the intersections, the control electrodes of the pixel transistors being connected to the respective gate signal lines(In fig.5 gate of transistor is connected to gate lines 98), the input electrodes of the pixel transistors being connected to the respective data signal lines(in fig.5 source of TFT is connected to data lines 97), the output electrodes(connected to Clc capacitor in fig.5) of the pixel transistors being connected to the respective capacitors, the liquid crystal display device

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comprising: means disposed at intervals of M (positive integer) lines of the data signal lines for selecting N (positive integer,  $M \geq N$ ) data signal lines from the M data signal lines and comparing voltages of the N data signal lines (in col.8 lines 5-39).

As per claim 2, Ham shows detecting means connected to the comparing means for detecting defective pixels (in col.8 lines 20-21 read as distorted color balance correcting method as a defective pixel).

As per claims 3,7 ham shows detecting means is composed of exclusive OR means (in col.8 lines 25-35).

As per claims 4,5,8,12 Ham shows data converting means connected to the comparing means for converting parallelly supplied data into serial data and outputting the serial data (in col.8 lines 10-20).

As per claims 9,10,11 Ham shows a liquid crystal display device having a plurality of data signal lines, a plurality of gate signal lines disposed intersection to the data signal lines, pixel transistors disposed at intersections of the data signal lines and the gate signal lines, and capacitors disposed at the intersections, the pixel transistors each having a control electrode, an input electrode, and an output electrode, at the intersections, the control electrodes of the pixel transistors being connected to the respective gate signal lines, the input electrodes of the pixel transistors being connected to the respective data signal lines, the output electrodes of the pixel transistors being connected to the respective capacitors (all the elements shown in rejected claim 1 and in fig.5), the liquid crystal display device comprising: a plurality of auxiliary data signal lines disposed corresponding to the data signal lines and connected to the output electrodes

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of the respective pixel transistors; and calculating means connected to one of the auxiliary data signal lines and one of the gate signal lines (in col.8 lines 5-47).

***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 571-272-7677. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H. Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nitin Patel  
Examiner  
Art Unit 2629

